

```
clear variables
```

```
syms x
```

```
fa = asin(2 * x + 3)
```

```
fa = asin(2 x + 3)
```

```
simplify(diff(fa))
```

```
ans =
```

$$\frac{2}{\sqrt{1 - (2x + 3)^2}}$$

```
fb = @(x)(atan(x ^ 2 + 1))
```

```
fb = function_handle with value:  
@(x)(atan(x^2+1))
```

```
simplify(diff(fb(x)))
```

```
ans =
```

$$\frac{2x}{(x^2 + 1)^2 + 1}$$

```
clear variables
```

```
syms x
```

```
int(x * sin(x ^ 2))
```

```
ans =
```

$$-\frac{\cos(x^2)}{2}$$

```
int((x ^ 2) * sqrt(x + 4))
```

```
ans =
```

$$-\frac{2(x+4)^{3/2}(168x-15(x+4)^2+112)}{105}$$

```
int(exp((-x) ^ 2), -inf, inf)
```

```
ans = ∞
```